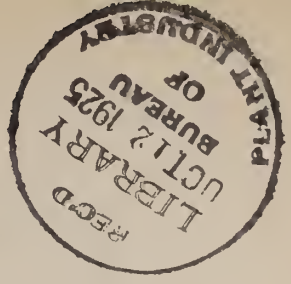
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

176



WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

OCT 3 1925

REPORT FOR WEEK ENDING OCTOBER 3, 1925.

HAVRE:

The past week was unusually cloudy and wet with a total precipitation amounting to 1.09 inches recorded for five days. Practically no field work was possible. The total precipitation for September was 3.75 inches, which is the highest in 46 years records, with the exception of 1911 and 1917. There is still some harvesting and much threshing of grain to be done. Damge to headed stacks varied from slight to very serious, the damage being largely on the quality of the grain.

Corn on the rotations has not been harvested. The leaves were killed by frost last week but to date there has been only slight loss due to winds.

The shelterbelt for the first time in several years has held its leaves to natural maturity. All leaves are now coloring except the Chinese elm.

Mr. Louis Vinke, in charge of investigational work with the Montana State College, was a station visitor during three days of the week.

HUNTLEY:

The first frost of the season was recorded during the week. Climatic conditions were such, however, that no injury was done to plants except such things as squash and melons growing in particularly exposed places. Sorghums, corn and beans were not affected, nor was the temperature low enough to kill potato vines.

Fall plowing on the rotation field was completed early in the week and is now under way in the miscallaneous cropping field. The precipitation of a week ago was not sufficient to make plowing any easier and the ground is still breaking up very dry and cloddy.

Seeding of winter wheat and rye has been finished, all the grain having been planted in dry seed beds with little chance of making much growth this fall unless conditions are unusually favorable.

Maximum temperature 59, minimum 29; precipitation .07 inch.

SHERIDAN:

The weather has been cloudy and unsettled throughout the entire week. Light rain fell the first of the week. None of the forage or corn in the field has dried since sufficient to weigh.

Sheridan, continued:

A part of the potatoes were dug during the week. Plowing has been in progress on the rotation plats the most of the week. It was found best to use the tractor plow for the most of the plats again this year, as the horse drawn plow could not be weighted sufficiently to keep it in the ground.

Maximum temperature 60, minimum 29; precipitation .56 inch.

DICKINSON:

The weather for the week was generally cold and wet. A small amount of precipitation was had which should be of some benefit to winter wheat and rye.

Most of the seed corn selected this fall was strung up to dry during the week.

Fall plowing was finished on the 2nd. Because of the dry weather in September the soil was not in the best of condition for plowing.

Maximum temperature 76, minimum 26; precipitation .26 inch.

MANDAN:

Agronomy

The past week has been overcast, with frequent light drizzly rains bordering on sleet and snow. Conditions were unfavorable much of the time for outside work.

Maximum temperature 69, minimum 27; precipitation .49 inch.

Cooperative Grazing Experiment

The steers were weighed on September 30.

Horticulture

Plum seed has been washed out and stratified in sand. A large number of plum, chokecherry and small fruit seedlings in the breeding blocks are being pulled out this fall.

The recent showers and moderate weather have been of considerable benefit to various vegetable crops, that were held back in growth by the dry weather, such as late cabbage, cauliflower, rutabagas, and beets for winter storage. Odds and ends of perishable vegetables have been harvested during the week. Flower beds and grounds were cleaned up, and greenhouses were put in shape for the winter, and storage bins for vegetables looked after. Manure in the pit was forked over during the week.

Mandan, continued:

Arboriculture

Trees in the conifer nursery were irrigated the first part of the week. The work was finished just in time to miss a spell of rainy weather that is still with us.

Mr. John L. Emerson, who was engaged in shelterbelt inspection work during the past summer, left the last of the month to take up the study of Forestry at the University of Montana.

A number of dead and dying poplar trees have been removed from the outside of the main shelterbelt, in preparation for replanting to Caragana and Russian olive.

A shipment of seed of Chinese elm and Caragana recently arrived from Mr. Dorsett, of the Office of Foreign Seed and Plant Introduction, collected in the vicinity of Harbin, Manchuria.

ARCHER:

The weather has been dry, cool and favorable for fall work except Saturday, October 3, when it was quite windy.

The work at the station consisted of threshing. This part of the fall work is practically complete. The yields from most plats were low. Due to the very low yields of grain, most of the oats from the Dry-Land plats were weighed and stored for feed. Due to the later seeding of the varietal plats it was possible to harvest these with a binder and thresh them.

A boiler is being installed in the milk house for the benefit of the dairy and the milk from the dairy is being sold as the highest class baby milk on the Cheyenne market.

Maximum temperature 79, minimum 31; precipitation 0.

NORTH PLATTE:

The total precipitation for September was 1.23 inches on the bench and 1.20 inches on the table, as compared with .91 inch at North Platte and a 50-year normal of 1.50 inches. The seasonal deficit to date is 7.34 inches at North Platte and 3.48 and 3.69 inches on the station table and bench, respectively.

North Platte, continued:

Winter wheat seeded September 23-25 has emerged with good stands on all plats except late plowing. On late plowing the moisture supply is too low to make complete germination possible and unless moisture is received soon plants which have started growth will probably not survive. A complete round of soil samples have been taken. Storage of moisture on all plats is considerably below normal.

COLBY:

Winter wheat is up to a good stand on the D.L.A. project and is growing nicely. Rye is also showing a good stand and growth. Soil moisture on land cropped this year is very low in soil moisture, although there is sufficient moisture in the surface foot to put the winter wheat into the winter in good condition. Soil moisture on summer fallow is lower than usual in percentage of moisture in the third, fourth, fifth, and sixth feet. In fact there is very little stored moisture in summer tilled land below the second foot. Fall worked ground shows some moisture in the first foot but very little available moisture below the first foot.

Milo yields are going to be relatively low this year. The plat of kafir growing on fallow should make as good a yield of grain as any of the milo grown on fallow ground. No sorghums have been harvested on the project to date.

Yesterday and today was spent in cutting a field of Early Sumac sorghum which was grown for feed. Owing to the fact that the Early Sumac is very short this year, the tonnage is going to be quite low; on the other hand, if it should be used for dry feed there should be very little wasted by the stock, due to the fineness of the stalk.

It is planned now to cut all feed as soon as the binder can get to it during the coming week. The grain sorghums will be left until frost or at least until the feed crops are out of the way.

Within another week or ten days the water line from the city plant should be laid and connected up. There remains two days work of ditch digging, so that the pipe should be laid before another week.

HAYS:

Fair weather prevailed throughout the week with moderate or average temperatures. Precipitation in the amount of .06 inch was received on October 1. It was an ideal week for fall seeding.

Hays, continued:

Drilling on the project was commenced Monday and finished early Saturday. The wheat all went into the ground in fine condition except on the late worked plats, which were dry or patchy. Wheat sown on Monday was up nicely Friday except on the late worked plats.

Drilling on the Cereal Project, except date seeding experiment, and on the commercial fields was finished during the week.

It has been necessary to make several applications of poison bran mash to protect the newly seeded wheat from grasshopper damage on the plats.

GARDEN CITY:

Ideal fall weather has prevailed throughout the past week. Temperatures have gone fairly high during the day, but nights have been cool.

All winter wheat plats were seeded on Monday. Those seeded on fallow have emerged to a good stand. It now looks as though a good stand would be secured on all plats. Upon sampling the H. C. winter wheat plats at seeding it was noted that there is little moisture below the first foot to give the crop a start at least.

Milo growing on fallows and green manure plats was harvested during the week. A good yield will be secured from practically all fallows. The crop growing on green manured plats was so short that the binder would not tie the bundles. A great deal of the sorghum growing on plats cropped last year will not yield enough to pay for threshing. The rains came too late in September to cause the crop to make much of a growth.

Maximum temperature 90, minimum 55; precipitation 0.

DALHART:

Nice weather has prevailed over most of the past two weeks, at times when it was not raining. Considerable rain has been recorded in these two weeks. Last week 2.34 inches were recorded and .88 inch was recorded this week, falling after midnight of September 30.

Crops are maturing pretty rapidly in this section. There is considerable lodging in the several varieties, with Sunrise kafir in the lead. Considerable harvesting was accomplished this week, one day before the last rain. The bundle feed has been shocked since the rain, the last having been finished today. There is considerable harvesting ready as soon as the fields will permit running the binder. The cowpea varieties for seed were harvested this week.

Dalhart, continued:

Winter rye and wheat are up to a good stand. The rye and wheat plats are being fenced for protection against rabbits. Most of this fencing will be completed by tonight.

Mr. E. F. Chilcott visited the station Wednesday and Thursday of this week.

Maximum temperature 86, minimum 49.

TUCUMCARI:

The past week has been favorable for field work and harvesting is well under way. Crops are maturing normally fast and grain yields seem assured on all but a few of the variety plats and late date plats, although many of the yields will be low. Cane for silage is making very rapid growth and will be ready for the silo within a few days. Cane is promising to make about ten tons silage weight per acre.

Wheat throughout this locality is emerging well and many fields show extensive stooling. Fall prospects for wheat were never more promising and there is little excuse for late seeding, as is often necessary because of adverse moisture conditions early in the fall.

Mr. E. F. Chilcott, of Woodward, visited the station this week.

Maximum temperature 88, minimum 52; precipitation .65 inch.

Average hourly wind velocity 5.8 miles. Evaporation for the six months period, 56.841 inches, or about 2.00 inches above the average, although September, with only 6.038 inches, was the lowest September on record.

LAWTON:

Weather in general throughout the week was favorable to the prosecution of field work. Heavy dews occur each night and a shower of .08 inch on October 1 was followed by cloudy, foggy weather.

The grain and forage sorghum projects were harvested during the week; wheat on the rotations was seeded October 3, and five varieties of winter barley were seeded September 29. The soil is in excellent shape for fall seeding and farmers are completing such work as rapidly as possible.

Sudan grass seeded August 3 was cut September 29, and made an excellent yield. Dwarf feterita, Barchett Kaoliang, Spur Feterita, and Black Amber seeded August 3 are now in bloom.

Lawton, continued:

A heavy infestation of cotton leaf worms exist in the alfalfa and corn fields at the present date. Favorable growing weather has made it possible for the alfalfa to just about hold its own but immediate harvest is now necessary. Within the past twenty-four hours the worms have begun to defoliate the cotton plants with extreme rapidity. It is possible that some damage will accrue even at this late date.

Several recent days of sunshine and maximum temperatures of 88 have caused cotton to open rapidly. Picking is in full progress and pickers are in acute demand at $2.00 per hundred.

WOODWARD:

After being kept out of the fields for practically the whole week, September 21-26, the weather has cleared up and allowed field work to progress during this entire week. There have been heavy dews and two heavy fogs which delayed starting on harvesting some mornings.

Three fields of wheat, rye, and winter barley for pasture have been drilled on the dairy farm. Wheat and rye have been planted on the D.L.A. project and on some bare spots which are likely to blow.

All kafir with the exception of CC-F, which is still green, has been harvested. The milo is at present being headed and the heads put in wire baskets. The stalks will be bound. The July 1 date of corn was harvested on October 1. The first picking of the cotton rate planting was completed on September 28 and 29. The June 1 date is ready to be picked, and there is considerable cotton open on the June 10 date.

Heading of kafir fields on the dairy farm with the wagon box header has gone forward part of the time. Some harvesting has also been done on the Cereal project.

Mr. E. F. Chilcott returned from a trip to the southwestern group of stations on the night of October 2.

Maximum temperature 85, minimum 54; precipitation 0.
Evaporation to October 1, .895 inch. Average hourly wind velocity, 6.2 miles.

96

REC'D
LIBRARY
OCT 21 1925
BUREAU OF
PLANT INDUSTRY

WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

OCT 10 1925

REPORT FOR WEEK ENDING OCTOBER 10, 1925.

HAVRE:

The week was not favorable for farm work. While only .07 inch of precipitation fell, the cloudy weather retarded drying of the soil. The corn binder was in the field for about a day and one-half. Threshing from stacked grain was possible one or two days during the week. The top and wet portions of headed stacks are being removed and the dry portion of the stack threshed.

The weather has continued wet this season for a longer period of time than any since the country has been farmed and perhaps longer than any other year in the past 46 years.

Director F. B. Linfield, of the Montana Experiment Station, was here on the 8th.

Maximum temperature 61, minimum 22; precipitation .07 inch.

HUNTLEY:

Field work has been interrupted during the week by snow and showers. No great amount of precipitation has fallen but the cool weather accompanying the wet weather has kept the ground too wet to work. Fall plowing on the Dry-Land fields was completed and threshing of soy and white beans was finished. Yields of these crops were much lighter than the average, but compare favorably with bean yields from neighboring dry land fields. Potato harvest is under way at the station but as yet has not reached the non-irrigated plats.

Maximum temperature 68, minimum 18; precipitation .10 inch.

SHERIDAN:

The week has been cold and cloudy until yesterday, October 9. Snow fell on the evening of the 5th and night temperatures have been below freezing regularly since.

The remainder of the potatoes were dug the 5th. Fall plowing in the rotation field was completed yesterday. Plats to be fall listed were listed this morning.

Maximum temperature 66, minimum 22; precipitation .19 inch.

MANDAN:

Agronomy

The past week has been cold with some snow. There was one clear day during the week. About two inches of wet snow fell during the night of October 6. No field work was done during the week.

Maximum temperature 59, minimum 16; precipitation .33 inch.

MANDAN:

Cooperative Grazing Experiment

The cattle have no doubt made a heavy shrinkage during the past week.

Arboriculture

A small amount of Russian Olive seed was collected on October 9. This seed will be planted in alternate rows with similar seed collected in early September for a comparison of any effect that freezing may have on seed before it is picked. The September seed had not experienced any frost before it was gathered.

Work has been started on pulling the shelterbelt trees. If weather conditions are favorable this job should be nearly finished by the end of next week.

Eighty-three per cent of the 1925 cooperators have reported the losses occurring in this year's shelterbelt plantings. Cards for making this report were sent out about September 1 and a follow-up card mailed on September 21. A second reminder will probably be necessary to get in a report from those still to be heard from. The total number of 1925 plantings is 187.

Horticulture

Potatoes were dug on October 6. Twenty inch spacing in the row gave better results than either twenty-eight or twelve inch spacing. Russet Rural potatoes in the variety test gave an average yield of 350.7 bushels per acre; Irish Cobbler 239.7 bushels; Early Ohio 227.4 bushels and Russet Burbank 195.1 bushels to the acre. These average yields were obtained with new certified seed obtained from various sources. Yields in the spacing experiment are comparatively low as the seed was affected by degeneration diseases.

A number of trees were pulled in the orchards and breeding blocks. Currants, gooseberries and grapes are being pruned. The gardens are being cleaned up in preparation for fall plowing. Vegetables have been stored in the root cellar and seed house.

ARCHER:

The weather has been cloudy and very cool with rain and snow during five days of the week. Rather heavy frosts occurred during the nights of October 7 and 8 which killed such crops as tomatoes and cucumbers. The total precipitation of the storm was .96 inch.

Archer, continued:

The work at the station has consisted of putting away most of the machinery, replacing seed corn and duckfooting corn land in the general field. This land is being seeded to winter wheat. The digging of potatoes on Dry-Land plats will be finished today. The yields are very good with a high percentage of large tubers.

Maximum temperature 80, minimum 26; precipitation .96 inch.

BELLE FOURCHE:

The first killing freeze of the season occurred on the morning of October 6. A temperature of 32 degrees without frost was noted on October 2, and a damaging but not killing frost was recorded on October 4 when the temperature reached 35. A light snow amounting to .09 inch fell on the 5th and 6th. The snow soon disappeared but the temperature hovered near freezing the balance of the week. Today is slightly warmer.

The two plats of potatoes were dug during the week. The average yield was 60.5 bushels per acre of which 55% were marketable. At least one-fourth of the tubers had been partly eaten by crickets. It is supposed that this damage was done by the crickets working through the cracks in the soil.

The plats to be seeded to winter grain have been staked and will be seeded the first part of next week. Seeding has been delayed with the object of working down the soil into better condition should a rain occur. At present some of the plats resemble a bed of rocks more closely than they do a seed bed for grain. The surface soil in all plats is bone dry, and no germination can be expected, even on the fallowed plat, until a rain occurs.

Maximum temperature 63, minimum 25; precipitation .10 inch.

Precipitation for September was .65 inch, and for the year from January to September 8.70 inches. This is 4.68 inches below the average.

AKRON: Week ending October 3, 1925.

Though badly needed to bring up the fall seeded wheat, no rain has been received the past week. The increase plats of Swadley Selections A-10, A-22, X, and Y were harvested. The yields were light but there was some corn due to the planting having been made on fallow. Selection 1-A out of Modoc which was purified last year and increased this year on fallow was harvested. This is a very early grain sorghum similar to the early selections secured out of kafir, none of which have as yet been purified. A temporary fence was placed around the variety corn experiment and the last spring ewe lambs turned on. There were no ears on any of the selections and just a very few on the outside guard rows of Akron White. Much time was spent in aiding the County Surveyor in establishing corners to the newly acquired land across the railroad.

Maximum temperature 90, minimum 43; precipitation 0.

AKRON:

The past week has been markedly colder with threatening rain. Work has consisted largely in extending the sewer line back of the Foreman's residence and on to the barn. The threshing of the bean and soy bean varieties was completed. The first frost of the season of a killing nature was recorded on the 9th. Beans in low areas showed that there had been a light frost sometime previous to this. Cooperative arrangements have been made with the railroad for fencing their right-of-way where it adjoins the station land with the 34-inch Elwood fencing. When completed the land on the north side of the railroad will all be fenced with 34-inch Elwood wire fence with three barb wires on top. The north and east sides have been completed. The west and south sides have waited for the establishing of the corners by the County Surveyor. It is planned to complete the fencing on the north side of the railroad this fall.

Dr. H. L. Shantz and Mr. R. L. Piemeisel visited the station early in the week. They made a hurried visit to the station and left by car with the Sartorious Balance which has been stored here. Mr. John Martin visited the station on the 5th. A serious effort is being made to adapt the grain sorghums to this region and much good undoubtedly will come from visits by Messrs. Martin and Vinall. What promises to be better yielding forage sorghums have already been sent here through the efforts of Mr. Vinall.

Maximum temperature 69, minimum 28; precipitation .19.

NORTH PLATTE:

The entire week has been cool and threatening. The total rainfall has amounted to only .48 inch but the sky has been overcast practically all of the time. The temperature fell below 32 degrees several times early in the week, but a killing frost did not occur until the 8th. At this time a minimum of 27 degrees was reached and held for several hours, so that all tender vegetation has gone down.

A few plats were plowed on the D. L. A. project. The last three days of the week have been spent in digging, grading and storing the last of the station potato crop.

COLBY:

There are no evidences of a killing frost to date, although the temperatures on three nights have been sufficiently cold for frost. The two nights that the temperature reached 32 degrees also had a relatively high wind and was cloudy. The other time that the temperature reached 30 degrees was so windy that there were no evidences of frost. Practically everything is out of the way from frost so that a frost would do but very little if any damage.

Colby, continued:

The commercial and small miscellaneous fields of early Sumac and of corn were harvested for feed this week. Some of the D. L. A. plats of milo and Feterita were harvested today. This was done even though there were a few heads of the milo that were hardly mature. The milo is extremely short and is very hard to handle. If the plats were a commercial field it would be very easy to harvest them with a header. We are attempting to get all that we can with a row binder. This will necessitate going over the plats by hand to cut a few of the skipped heads and some of the shorter stalks.

Winter wheat is growing nicely. The cool, damp, foggy weather has been fine for the wheat. Some of the very early seeding of winter wheat and some of the volunteer wheat has more growth than we like to see at this time of the year. Taking everything into consideration the wheat will go into the winter in this locality in excellent condition.

Some counts have been made on the winter hardiness nursery. The smut nursery has emerged to a stand that was seeded on the 2nd of October. Stands were secured on all of the seedings of the Hessian Fly date of seeding of winter wheat.

There remains about three days cutting of sorghums on the station. This is practically all grain sorghums material except some of the sorghum varieties. It will take at least all of the coming week to get the fall cutting and shocking done.

HAYS:

The first frost of the season occurred on the morning of the 9th, and another frost occurred the following morning. These were both very heavy frosts, the temperature dropping to 25 degrees on the first night and to 23 degrees the second night. The maximum temperature for the week was 80. Except for one day it has been cloudy or partly cloudy all week. Heavy fogs were present on two mornings. No precipitation occurred except for a trace. A good rain is needed to complete germination of wheat.

Work on the project during the week has consisted largely in securing total weights of sorghum crops, and threshing same. Also some time was spent spreading grasshopper poison to protect the wheat, most of which is nicely up.

GARDEN CITY:

Cool, cloudy, foggy weather has prevailed throughout the past week. The sorghum crops have made little advancement toward maturity. A few of the better plats of Dawn kafir will be ready to cut this coming week. Most of the sorghums are too short to harvest with the binder.

Garden City, continued:

Rye was seeded on the green manure plats early in the week, but has not emerged as yet. A good stand of winter wheat has emerged on all plats except M. C. A.

All Sudan and drilled kafir plats were harvested this week. A fair cutting of Sudan grass was secured as a second crop. The only plat of drilled kafir that will make anything like a yield is the one grown on fallow. The other six kafir plats produced a very low yield of inferior quality feed.

Maximum temperature 78, minimum 33; precipitation, Trace.

DALHART:

The week has been cold and damp. Precipitation was recorded on two mornings, .04 and .05 inch. During these days, while it was not raining, it was misting at times. The delays on account of rain the previous week and the lack of drying weather this week has put the work behind schedule a little. The weather report for this section predicted a killing frost for the night of the 9th, but nothing happened. The minimum temperature to date is 36, recorded on the morning of the 9th.

The fore part of the week during the misty weather was so sloppy that no field work was accomplished. The last few days have been free of mist but have remained cloudy. Heavy winds have caused sufficient drying that field work could be accomplished.

Considerable heading was done in the varieties, the heads being stored in wire baskets. Most of the heading was done on crops that had lodged badly and on the more dwarfed growth. Many of the crops are so tall this year that it is impossible to head them before binding. The binder was kept running Friday and Saturday of this week. All the kafir on the rotations and many of the variety plats were bound and shocked. Extra labor was secured from among the high school students in order to get everything shocked that was bound. This was accomphished, the shockers catching up when the last plat was bound. The binder will be started again the first of the week if weather will permit. The cowpea seed crop is to be cut as soon as conditions will permit. Nearly all the seed for next year's planting is selected and stored for drying.

Cotton is beginning to open pretty good. Some has been open for some time but not enough to pay to make a picking. The first picking will be made the first of the week in order to save some that might be blown out. The army worm has worked on the cotton so devotedly the past month that they have about cleaned up the leaves. Coming just at this time, it is rather a help to cotton picking than a hindrance. The damage to the cotton crop will not be felt by this attack.

Mr. J. B. Sieglinger, of Woodward, Oklahoma, visited the station one day this week. He came via the Panhandle of Oklahoma and returned via Panhandle of Texas.

TUCUMCARI:

Warm, pleasant weather the early portion of the week permitted cutting cane and filling the silo, picking cowpea seed, and pulling and seeding a heavy yield of broomcorn from the variety, date and spacing plats.

The mean temperature the first four days of the week was 69, while that of the past three has been 46 degrees. While we have had no frost, conditions will be threatening as soon as the skies clear. For the past forty hours the minimum has been 38.5, with the maximum in that period 44. Precipitation has totaled only .05 inch, but during the past three days no harvesting has been possible, as the weather has been cloudy, foggy and misty, with every leaf dripping water.

Today is cloudy, but a brisk wind dispelled the fog early this morning, so the row binder is being started. Some increase kafir and about thirty plats practically ripe will be harvested today. This will reduce the standing crops so two days cutting, in case of frost, will complete harvest.

An early frost will greatly reduce grain sorghum yields over this locality as well as on the station. All rotation plats have matured; most increase is practically mature and the early dates are in the shock, with the exception of Sumac cane and the kafirs. Late date plats and numerous variety plats will require two to four weeks to fully mature, so it is probable many of these plats will produce but very little grain. In many cases the first heads were produced during the drought and thus are small, while the late sucker heads or branched heads are still very immature. If these could mature, good yields would be made, but the chance of their maturity is very slight. Early sown wheat is excellent, while ranges are the best in years.

Maximum temperature 91, minimum 38.5; precipitation .05 inch.
Average hourly wind velocity, 5.5 miles.

BIG SPRING:

The weather during the week of October 3 was exceptionally hot and sultry for this time of the year, but conditions during the past week have been quite the reverse. The temperature dropped to 40 on October 9 and was accompanied by a cold drizzling rain.

The second cutting of Sudan grass was hauled in last week. A fair yield of a good quality hay was obtained. Other work consisted of picking cotton, selecting seed and heading milo plats. This week the work consisted of cutting sumac and in filling silo until the rain stopped all field operations. Another half day's work would have filled the silo, but now it will be impossible to do anything with it until next week.

Maximum temperature 95, minimum 40; precipitation 1.76 inches.

LAWTON:

The weather covered a wide range during the week and in general was unfavorable to cotton and to the prosecution of farm work.

The maximum temperatures varied from 51 to 89, while the minimum temperature recorded for the week was 38. The first frost of the season although predicted has not yet occurred. Rain on the 7th and 8th amounted to 1.60 inches. Since that time the weather has been cold, cloudy and threatening.

Wheat and barley which were seeded on the 3rd was up to a good stand on the 10th. Fall seeding throughout the county is about two-thirds completed.

Cotton is going to the gins as rapidly as possible as the weather permits picking. The cotton leaf worms have depleted most of the foliage on the plants but the wet, cool weather appears to hold maturity of plant growth and maturity of bolls in delay. On some of the bottom lands the plants are frequently more than five feet tall with a negligible percentage of mature bolls. On the upland, the plant growth is not large and the bolls have opened with considerable rapidity.

Good stands of alfalfa were secured on the September seedings and sufficient plant growth has developed to go through the winter in good shape.

WOODWARD:

The weather has been cold and damp during most of the week. On several mornings a heavy fog prevailed, and two light showers were recorded on the 7th and 8th, .01 and .05 inch, respectively. The temperature readings ranged from 95 degrees on the 4th to 33 degrees on the 9th. We have not observed any frost here at the station, but frost has been reported from several places in the vicinity.

Work was somewhat hindered and made disagreeable by the inclement weather that prevailed most of the week, but considerable heading of kafir and milo and other grain sorghums was done. Most of the row-feed, after being headed, was cut with the binder, preparatory to filling silos on the Dairy farm. Some cotton was picked.

Wheat is growing nicely, and is large enough in the early seeded fields in the neighborhood to give them a pleasing green aspect. The farmers have most all of their wheat planted, except a few fields where late spring crops are to be followed by wheat.

Maximum temperature 95, minimum 33; precipitation .06 inch.
Average hourly wind velocity 5.5 miles.

7
96

REC'D
LIBRARY
NOV 1 1925
BUREAU
OF
PLANT INDUSTRY

WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

OCT 17 1925

REPORT FOR WEEK ENDING OCTOBER 17, 1925.

HUNTLEY:

Cool, cloudy weather with frequent light showers and snow flurries has prevailed throughout the week. Not enough rain has fallen to be of much benefit to fall sown grains, however.

Dry-Land potatoes were dug on the 14th and constituted the only field work during the week. Yields of potatoes on the non-irrigated plats were small and the percentage of marketable tubers was extremely low for all varieties. Apparently growth was checked by drought just as the potatoes were forming and rainfall since that date has not been sufficient to develope them.

Inspection of winter wheat plantings showed most of the seed still ungerminated.

Maximum temperature 65, minimum 22; precipitation .23 inch.

SHERIDAN:

Unsettled weather has prevailed over most of the week. Rain on the 11th and light snow and rain again yesterday prevented weighing and hauling much of the corn. The afternoons of the 10th and the 15th have been the only times that this work could be done, and about half of the plats in the rotation field were hauled. The fall soil samples on the MC corn and wheat plats were taken this morning.

Maximum temperature 64, minimum 20; precipitation .64 inch.

DICKINSON:

The weather has been very changeable with several showers and a few snow squalls. Temperatures were about normal, the precipitation .35 inch for the week, and .85 inch to date this month.

Digging potatoes and root crops was finished early in the week. Russet Burbank gave the highest yield in the potato variety test with 147 bushels per acre.

Cobbler potatoes on fallow in the rotations made 222 bushels and on spring plowed wheat stubble only 88 bushels. In 1924 the yield on fallow was 164 bushels and on grain stubble 192 bushels.

Corn on the rotations is being husked. The yields will be about average, the corn being very light on some plats but good on others.

Practically no fall plowing has been done in this district because of the dry condition of the soil.

Maximum temperature 53, minimum 22; precipitation .35 inch.

MANDAN:

Agronomy

The past week was cold and cloudy with rain and a trace of snow. No field work was done during the week. There has now been nearly three weeks of cloudy, disagreeable weather.

Winter rye and winter wheat which were planted some time ago are now up on fallow. Other plats do not show a stand to date.
Maximum temperature 62, minimum 22; precipitation .22 inch.

Cooperative Grazing Experiment

The experiment was closed for the season during the past week. The weather was so unfavorable as to make the final weighings difficult. The following gains, which are below the average, were obtained for the season.

Pasture	Days Grazed	Pounds gained per Head
100 acre	150	296
70 "	150	269
50 "	150	246.5
30 "	115	158.0
Rotation(70 acre)	150	239.1
Brome (25 acre)	115	169.5

Arboriculture

Work of pulling trees has been going on all week. This should be completed ready for fumigation by the middle of the coming week. Counts of the trees pulled so far indicate that the number will run somewhat below the preliminary estimate made in September.

Horticulture

All garden crops have been harvested and stored. Hauling manure and fall plowing are the only jobs remaining in this department. Fruit trees have been run under with the tree plow to hasten the dropping of the leaves preparatory to pulling some time next week. Stock budded this year has been covered with soil for the winter. A number of currants, choke cherries and plums have been pulled in the breeding block.

BELLE FOURCHE:

The whole week was cold and threatening, but the amount of precipitation was small. On the 16th snow fell rapidly for about an hour. This snow has almost completely disappeared.

The winter grains were seeded on the 15th. The soil in some of the plats was in a lumpy condition, but the grain was covered much better than was anticipated. The amount of moisture that fell during the week was too small to aid germination.

Maximum temperature 61, minimum 22; precipitation .22 inch.
The precipitation for October to date is .39 inch.

ARCHER:

The weather has continued cold with .94 inch of precipitation recorded for six days during the week. This makes a total of 1.90 inches of precipitation for October. Friday, October 16, it started to snow from the north. The temperature kept falling until a minimum of 7 degrees was reached. This morning there are fair sized drifts everywhere.

The digging of potatoes took place whenever it was not actually storming and a good crop was harvested. A few shocks of wheat and flax remain to be threshed and a few sunflowers remain to be cut and the seed threshed. Some seeding of winter wheat in the general field was accomplished.

Maximum temperature 63, minimum 7; precipitation .94 inch.

AKRON:

A continuance of the showers of last week has been witnessed this past week. Some farmers are planning to seed wheat yet this fall and others are making plans to reseed. It is not felt that any great amount of germination has taken place here on the station where wheat was seeded after the 10th of September and full stands are looked for following the recent favorable rains. Though greatly delayed, the rains have caused a great revival of hope for the fall seeded wheat. Barring unusually early winter, the wheat should still be able to stool quite well yet this fall.

The first snowfall of the season occurred Friday afternoon and evening. Snow and rain together totaled .18 of an inch. Snowfall was heavy enough to cover the ground. The snow was entirely melted by Saturday at 3:00 p. m.

Akron, continued:

Work during the past week has consisted of doing odd jobs. The placing of the sewer and water line back of the barn and the foreman's residence was completed. Some time was spent aiding the County Surveyor. All corners have been established and work of completing the fencing on the north side of the railroad will be pushed yet this fall. The Burlington Railway is cooperating with the fencing of the line adjoining their right-of-way.

Mr. Baker and his Lone Star High School Agricultural class visited the station Thursday.

Maximum temperature 66, minimum 33; precipitation .67 inch.

COLBY:

The weather has remained cool throughout the week though there has not been really a killing frost recorded to date. This morning a light rain fell, which at times turned to a real snow storm. This phenomenon is slightly unusual and unexpected. The snow melted as soon as it touched the ground. The rather frequent showers the past thirty days have kept the surface few inches of the ground moist at practically all times so that winter wheat has made excellent growth and has furnished early fall pasturage to those farmers who seeded early or who had much volunteer wheat. Winter wheat on the station is going into the winter in excellent condition. Most of the winter wheat on the station is from 4 to 6 inches in height and has good growth and color.

The remainder of the sorghums were harvested today. Every stalk of corn or sorghums has been cut for feed this fall. The silos have not been filled yet. We do not expect to fill as many silos as usual this fall due to the shortage of feed for filling.

The delayed frosts have permitted the maturing of the milo so that very much better grain yields will be secured on most of the plats than was anticipated earlier. Bagged heads of sorghums from the sorghum nursery have been stored and smut counts made on the smut nursery sorghums.

A representative from the State Accountant's Office made the annual audit of the station accounts on Thursday of this week.

The new water system is all but completed. The only thing which is holding up the connection is the fact that a water meter ordered by the city sometime ago has not to date been received. The necessary pipe has all been laid.

HAYS:

Generally the weather has been cloudy and cool but no frost or freezes, and but little rain. However, one shower occurred - .47 inch on the 14th. Wheat needs a good rain to complete germination.

The work on the project has consisted largely in shucking corn, and heading kafir where the stalks are to be left standing on the ground over winter.

The work on the commercial fields consists largely in putting up feed crops.

GARDEN CITY:

Another cloudy damp week has passed. We have had little sunshine during the past three weeks. Not enough moisture has been received to do any good, but enough was received to prevent much field work.

A few plats of Dawn kafir were harvested during the week. Aside from that, soil sampling was the only field work accomplished. Winter wheat continues to make a satisfactory growth.

Enough snow fell last night to cover the ground, but it soon melted this morning. The lowest temperature recorded during the night was 32.

Maximum temperature 77, minimum 32; precipitation .21 inch.

DALHART:

The past week has been very unfavorable for field work. The fore part of the week started off with fair weather and drying winds. Frost was reported by the weather bureau and in order to get as much of the harvesting of matured grain bound before frost, the binder was operated all day. The cowpeas in the alternate cereal-forage block were harvested also. The weather was favorable at sundown for a fair day following. That night the sky clouded over and before morning it was raining. This kind of weather has prevailed during the entire week. The fields never dried off sufficiently to run the binder. During one afternoon when it was not raining, the cotton was picked on the rates and first and second dates where open. Only a small per cent was open at that time but the picking was made in order to avoid loss by falling out and being lost by blowing away or being rained partially under. Some heading was done during a part of two days of the week when the weather would permit. None of the shocking has been done from last Monday's binding on account of the bundles being too wet at all times to shock. They are better off lying on the ground than shocked when wet. This will be picked up at the first opportunity.

The first frost of the season occurred on the night of October 18, the temperature going down to 28 degrees.

TUCUMCARI:

Although there has been no frost in this locality, the week has been cold, cloudy, and rain has fallen on five days. Field work has been impossible since Monday, when most of the broadcast cane was cut and shocked. The late date plats are still immature and it is doubtful whether they will fully mature, as grain is ripening very slowly. Increase milo, which will be headed, will in most cases mature.

The writer went to Mosquero in company with Mr. J. L. Lantow, of the State College, the middle of the week for the purpose of selecting steer calves for use in the feeding experiment the coming winter. From an unusually good group of four hundred calves thirty head of very typy, uniform calves were selected. They are being dehorned today and the experiment will doubtless start next week.

Maximum temperature 75, minimum 37; precipitation 1.20 inches.

BIG SPRING:

The weather during the past week has been so rainy that very little field work could be accomplished. The filling of the silo was completed the first part of the week after several days delay. Other work of the week consisted of picking cotton and cowpeas for seed when the weather would permit. During the rainy days some needed repairs were placed on the binder and baskets were made for heading the sorghums in.

A bad storm did considerable damage to open cotton in parts of the county, but it did not hit the station.

Maximum temperature 80, minimum 40; precipitation 1.14 inches.

LAWTON:

Cotton suffered another week of unfavorable weather and the present prospects do not indicate an improved condition at all soon. Low temperatures, clouds, and rain characterized the week. Field work with the exception of a limited amount of cotton picking has been impossible throughout the week.

On the 14th a torrential rain of 1.79 inches, accompanied by considerable hail and driven by a high wind, inflicted severe damage to crops and farm and city property. At Fort Sill less than 1 inch was recorded, while the Government gauge in Lawton showed more than 3 inches. On the station 1.67 inches of the total amount fell within fifteen minutes. The runoff was rapid and heavy and fields were badly washed. Crop damage was somewhat variable. In a few instances cotton remaining in the field

Lawton, continued:

suffered a loss almost total, while on other farms nearer the edge of the storm the damage was not heavy. Some plats of cotton on the station that had not yet been picked lost as much as 25 to 30% of the lint from open bolls. Should drying weather develope in the near future most of this lint will be recovered from the soil although it will be of inferior grade. However, at the present time cold, cloudy, showery conditions continue.

The third cutting of alfalfa has been in the windrow about 10 days. It was turned once but further handling has not been permissible.

Maximum temperature 48, minimum 79; precipitation 1.90 inches.
Total precipitation September 11 to date totals 11.31 inches.

WOODWARD:

The weather has been cold and cloudy almost continuously during the past week. We received .60 inch precipitation for the week, which occurred in five showers, ranging from .01 to .48 inch. The weather has been ideal for the young wheat, but has retarded harvesting of spring crops, and other field work in general.

Work during the week consisted of filling silos, harvesting and binding row-feed, picking cotton, grinding feed, threshing milo, and repairing machinery.

Maximum temperature 70, minimum 39; precipitation .60 inch.
Average hourly wind velocity 6.5 miles.

6

REC'D
LIBRARY
NOV 4 1925
BUREAU
OF
PLANT INDUSTRY

WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

OCT 24 1925

REPORT FOR WEEK ENDING OCTOBER 24, 1925.

HUNTLEY:

Cool and cloudy weather has prevailed during the greater part of the week. Occasional light showers and snow flurries have occurred but the total precipitation received has been small. As yet, no fall sown wheat or rye has appeared above the ground although inspection early in the week revealed seed in the more favorable spots beginning to sprout.

Field work has consisted of some miscellaneous hauling of material and general cleaning up. Weights on Sudan grass and sorgo were taken.
Maximum temperature 70, minimum 13; precipitation .10 inch.

SHERIDAN:

Unsettled weather continued throughout the week. Precipitation was recorded on 5 out of the 7 days, mostly light rains until the last 2 days. About 4 inches of heavy wet snow covers the ground at present, but the atmosphere appears more clear than for some weeks.

Corn was dry enough to weigh and haul the 15th, although it was necessary to take larger samples than usual to determine the moisture content. The grain was hauled from all but 7 of the remaining plats in the rotation field at that time. The snow is being cleared today off everything yet remaining in the field to be weighed.
Maximum temperature 70, minimum 11; precipitation 1.44 inches.

DICKINSON:

Unsettled weather continued through the week, with mild temperatures and only a little precipitation.

Husking of corn on the rotations and the varieties was finished. Yields were only fair except that on fallow went over 40 bushels an acre. Samples were taken for drying before final yields are figured.

A little alfalfa seed was threshed but the yields were not very satisfactory. From reports received some fair yields are being threshed in the area.

Mr. C. N. Ainslie, Bureau of Entomology, with headquarters at Sioux City, Iowa, visited the station October 23. Mr. Ainslie was looking specially for Hessian fly but none was found. Last year at this time a heavy infestation was found on winter wheat plants which had lived through the summer.
Maximum temperature 56, minimum 14; precipitation .10 inch.

MANDAN:

Agronomy

The past week has been cloudy and cool. There has been a month of cloudy and cool weather with only two or three clear days. No field work was done during the week.

Maximum temperature 53, minimum 16; precipitation .03 -snow.

Cooperative Grazing Experiment

The cattle used in the grazing experiment during the summer were shipped to the Agricultural College on the 21st.

No cattle were lost this season, nor was it necessary to make any substitutions in any of the pastures during the season.

The gains were a little below average for the season. The pastures were grazed closer than usual, which shows that grass production was below normal.

Horticulture

Trees in the seedbeds and nursery have been dug and heeled-in for the winter. Fruit trees to be sent to horticultural cooperators were fumigated before being heeled-in.

Arboriculture

Digging, fumigating and heeling-in of the shelterbelt nursery stock has just been completed. The actual number of trees is somewhat less than the field estimate taken in September. There will be enough, however, to make all the shelterbelt plantings accepted for the spring of 1926.

ARCHER:

The weather has been favorable for work but the soil has been so wet that field work could not be undertaken until Thursday, October 22, when the remainder of the seeding of winter wheat in field No. 3 of the general field was completed. On October 23 and 24, the fall plowing in the rotation plats was under way.

Maximum temperature 63, minimum 18; precipitation .09 inch.

AKRON:

The past week has threatened rain or snow almost every day. This necessitated finding work about the buildings a goodly part of the week. Many odd jobs were cleaned up. Some time was spent on the fencing.

Second snowfall of the season occurred Friday evening when for a few hours the snow fell so thick as to obstruct vision even with car lights on. Examination of winter wheat revealed it sprouted. There is plenty of moisture now to support some growth, and, barring an early winter, wheat still could make considerable progress. Considerable wheat has been seeded over the county during the past ten days.

The forestry trees almost without exception shed their leaves normally, there being considerable autumn color in this planting. The fruit trees went into the winter, as so often they do, with their leaves still green and turgid.

Maximum temperature 69, minimum 17; precipitation .50 inch.

NORTH PLATTE:

Weather during the week heralds the approach of winter. The temperature dropped to 12 degrees on the 18th. Snow fell all day of the 23rd. Most of this melted as it fell, but this morning, the 24th, there is an inch or so of snow on the ground and the trees are heavily laden.

Corn on the D. L. A. project was husked with the shredder on the 20th. Yields ranged from .5 bushel on manured Rotation 43 to 35.2 bushels on M. C-C summer tillage. The average yield of 78 plats was 8.3 bushels per acre. Wide differences occurred between plats of similar treatment. This is probably due to injury extending over the line of possible recovery in some cases and not in others, during seasons of drought followed by rain during the summer.

GARDEN CITY:

The past week has been one of varying temperatures. The first killing frost was recorded last Monday morning, the 19th. Snow has been falling for the past two hours but is melting as soon as it reaches the ground.

Practically all of the standing sorghums were harvested during the week. Most of the plats were cut with a mowing machine and raked with a hay rake.

Maximum temperature 82, minimum 27; precipitation .04 inch.

DALHART:

On Sunday night of this week the first killing frost was recorded. Field operations had been delayed one week due to bad weather and considerable harvesting remained to be done. The weather during this week has been very favorable for field work, excepting today, Saturday, which was cloudy and misting a part of the time. No time was lost from the field, however, on account of the mist. The lowest temperature recorded during the week is 26.

At this writing all harvesting of experimental work is completed. It was finished late today. The work has been rushed as rapidly as possible all week. At the time the frost occurred, the fields were too wet in places for harvest. The binder was operated on the driest places until the entire plat field was finished. It was impossible to keep the binder running all week on account of conditions. There was not sufficient amount of standing crops in the experimental work left for binding to keep the binder operating all week. The remainder of the time was spent in heading the milo on all rotations and shocking same. The heads were stored in wire baskets. Everything that was down from the previous week was shocked and some additional heading done in the cereal and forage block. The peanut varieties were the last to be harvested. The results of the peanut harvest are very flattering considering the conditions which existed after planting and the lateness of planting. There is about one day's shocking of experimental plat crops and this will wind up the plat work until threshing. There remains plenty of harvesting in the increase fields, but there is no rush in attending to this. The cotton is opening very slowly since the frost.

Winter wheat and rye are up to a good stand and are stooled out until the ground is nearly covered. Winter barley, which was seeded last week for windbreak areas, is just emerging to a good stand. The rabbits are unable to penetrate the fences around the grain plats but are keeping the wheat and rye down on the outside of the fences.

TUCUMCARI:

The first frost of the fall occurred on the morning of October 19, when a minimum of 25 was recorded. About twelve acres of plat and increase land was cut and shocked the two days following this, completing all 1925 cutting.

Several acres of increase milo have been headed, cowpeas were picked for the last time and the seed cleaned, and peanuts were harvested. The first picking on rotation cotton was made, while the date and spacing plats have not opened sufficiently to make picking necessary.

Tucumcari, continued:

Thirty head of steer calves, ten to the lot, are being started today on the feeding test conducted in cooperation with the B. A. I., and the New Mexico State College. The animals are six to seven months of age and the average weight is 360 pounds. Feeds used in the experiment are as follows:-

Lot No. 1.	Lot No. 2.	Lot No. 3.
Ground milo	Ground milo	Ground milo
Cottonseed meal	Cowpea hay	Cottonseed meal
Cane silage	Cane silage	Cane fodder

Messrs. W. H. Black, B. A. I., Washington, D. C., V. V. Parr, B. A. I., stationed at Stamford, Texas, and J. L. Lantow, State College, New Mexico, were here early in the week in connection with the steer feeding experiment, while the animals were graded by the Grading Committee, consisting of Professor F. G. King, Purdue University, and Messrs. L. B. Burk and A. T. Edinger, of the Bureau of Economics.

Maximum temperature 77, minimum 25; precipitation 0.

BIG SPRING:

Weather during the past week has remained favorable for field work until today when it started raining. The first real norther of the season hit here on the 19th, when the thermometer dropped to 35, this being the nearest to a freeze that this vicinity has experienced this fall.

Work this week has consisted mainly of picking cotton, harvesting forage sorghum plats, and an increase field of sumac. Although all forage sorghums are late in maturing this year, they are making good yields of fine quality forage.

Maximum temperature 85, minimum 35.

LAWTON:

Almost a week of sunshine made some field work possible. The present weather indications, however, are unfavorable. Heavy dews and low wind velocity during the week permitted the soil to dry slowly while cotton picking was possible only about 5 or 6 hours each day. A very appreciable percentage of the total cotton crop remains on the plants in the form of green bolls which open slowly. Cotton grades have been seriously damaged by fall storms and commands an inferior price on the market. Middling cotton is worth approximately 20¢ per lb. on local markets, while the damaged and trashy grades range as low as 12¢ per lb.

Lawton, continued:

Wheat varieties were seeded on the 22nd in an excellent seedbed. Other seedings on this date include six varieties of winter barley and a wheat date test.

Harvest of grain and forage sorghums was completed October 23. With the exception of a June 15 planting of grain sorghums the crops harvested included several varieties of grain and forage sorghums planted August 3. A good growth was secured on all varieties but maturity was not possible under the existing conditions.

The first frost of the season occurred on the night of the 18th, when the temperature dropped to 32. Crops, however, did not evidence any damage. The maximum temperature for the week varied from 50 to 81.
Maximum temperature, 81.

WOODWARD:

This week has been generally good for field work, and farmers have been very busy harvesting crops, this work having been prevented by a long period of foggy, drizzly weather. Today, however, there is a rain and snowstorm in progress, and farmers will be further delayed in harvest. Practically all of the station crops are in the shock, but some few of them may rot if damp weather continues. The damp weather has given wheat a very unusually good start.
Maximum temperature 76, minimum 28; precipitation .01 inch.
Average hourly wind velocity 4.9 miles.

NOTES:

The final Weekly Station Report of this office for the current season will be discontinued with the issue for the week ending November 14, 1925.

Referring to "note" in Weekly Station Report of this office for the week ending September 19, 1925, in which it was stated that the Comptroller had made a decision making it doubtful whether Station Superintendents, without Special Temporary Disbursing Agent authority, may be reimbursed for salaries paid by them to employees on station:

Notes, continued:

In the case submitted of such salary settlement by a Station Superintendent to an unskilled laborer under appointment who was compelled to leave town suddenly and left the service, the General Accounting Office of the Treasury has allowed the claim in this particular case. It would seem, therefore, that where a similar emergency case of this character exists, settlement will be allowed. However, Station Superintendents are cautioned that it is a privilege that should be used only when the most urgent and obvious necessity arises for paying the salary of an employee under appointment by a Station Superintendent; and that all normal payments of such salary must be paid in Washington by the Disbursing Office. It is within the range of possibility that future action by the General Accounting Office of the Treasury might disallow a claim of direct settlement of salary by Superintendent to an employee under appointment.

Station Superintendents should, therefore, have all salary settlements made in Washington whenever possible, and settle directly with employees under appointment only when the most urgent necessity arises; and clearly set forth their reasons for taking such action when submitting their reimbursement voucher.

96

WEEKLY STATION REPORTS

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE

OCT 31 1925

REPORT FOR WEEK ENDING OCTOBER 31, 1925.

HUNTLEY:

Unseasonably wintry weather has been the apportionment of this locality during the past week. With the exception of the last two days, snow has fallen sometime during each twenty-four hours, and at present, after two days of thaw, is about 5 inches deep. As the ground is not yet frozen, practically all of this moisture is entering the soil and should be of benefit to fall sown grains if favorable temperatures are received during the next week.

The minimum temperature reached during this cold snap was 15 below zero but as the ground was covered deeply with snow the soil is still frozen.

Maximum temperature 45, minimum -15; precipitation .81 inch.

SHERIDAN:

Heavy snow fell again during the first of the week, precipitation being recorded on each of the first 5 days of the week. The last two days, and today so far, have been clear and the snow has been melting some.

The remainder of the corn left lying on the ground has been brought inside to dry. As much as possible was stored in the office building, where it is drying quite rapidly, and weights probably can be secured during the coming week. The remainder was stored in the loft of the implement shed, and although it has dried materially there since being brought in, it probably will be some time before weights can be secured. White beans, and a part of the soybeans and cow peas also have been stored in the implement shed to dry. None of the these crops seem to have been damaged materially so far.

October averaged 2 degrees below the coldest previous October recorded here, and 11 degrees below the average. About 16 inches of snow was recorded and about 3 inches remains on the ground now. Precipitation was recorded on 16 days of the month, and amounted to 1.76 inches above the 8-year average.

President Crane, of the University of Wyoming, together with Dean John A. Hill and Mr. W. L. Quayle, of the University, and Mr. Joseph Elliot, Mr. Frank Holliday, and Mr. D. P. B. Marshall, members of the Board of Trustees of the University, visited the station Thursday in connection with the proposed work to be done here by the State.

Maximum temperature 38, minimum -8; precipitation .74 inch.

DICKINSON:

Unsettled weather with extremes in temperature obtained during the week. The fore part was cold and blustery followed by a minimum of 15 below zero on the morning of the 29th. This is a record for cold in October at this station. The previous low was minus 11 degrees recorded October 25, 1919.

The winter's supply of lignite was hauled during the week.

Winter wheat and rye seeded early in September have not emerged sufficiently for stand counts except in spots.

Maximum temperature 58, minimum -15; precipitation .25 inch.

MANDAN:

Agronomy

The fore part of the week was extremely cold for this season of the year. The weather has cleared and warmed up during the past three days. There was practically a month of cloudy weather. There has been only one other October (1919) since the station started, that the temperature went below zero. During that year the temperature dropped to 14 degrees below on October 25.

Weather conditions were favorable, so it has been possible to thresh yesterday and today. A few plats of flax in the rotations and some for the Office of Cereal Investigations, were threshed yesterday. Alfalfa is being threshed today. While the yield will not be heavy, the quality of the seed is very good.

If the weather remains favorable, corn shredding will start next week.

The total precipitation for the month was .69 inch. The total amount for the year to date is 13.55 inches. The 50-year mean for the same period is 15.84 inches.

Maximum temperature 57, minimum -8; precipitation, Trace.

Arboriculture

Making of Northwest poplar cuttings has been completed. There is a slightly larger number than last year. This practically completes the outdoor work for the year.

Mandan, continued:

Horticulture

Unusually cold weather for October resulted in frozen soil, and halted such field operations as plowing, planting seed, planting cuttings, and covering raspberries and grapes. With the soil frozen to a depth of several inches it is doubtful if such work can be finished.

Blight cankers are now being cut out of apple and crab trees. It will be necessary to pull out some badly cankered Transcendent trees. Shellac and coal tar are being used as wound dressings.

Flower beds on the grounds are being manured and put in shape for next year. Beans from the acre garden have been threshed, but the yields are not as high as last year. Manure in composting heaps has been forked over. Grapes and currants were pruned in the early part of the week and cuttings made.

BELLE FOURCHE:

The past week was the coldest ever recorded in October at this station. On three days of the week the minimum temperature was zero or lower. A minimum temperature of 16 degrees below zero on October 26 broke all records for cold this early in the season. The previous low record was seven below. About five inches of snow fell during the week, and this, together with the low temperature made the continuation of field work look rather dubious. However, the last few days have been warmer and the snow is almost gone. The soil has now thawed out and plowing has been resumed. The last of the dry land plowing is finished. The only plats not plowed early in the fall were the corn stubble plats.

The sugar beet harvest on the project was delayed through a shortage of cars. Many beets are still in the ground but it is thought that ten days of good weather will enable all of the farmers to complete their harvest.

The precipitation for October was .96 inch. This is .37 inch below the average. Precipitation for the year to date is 5.03 inches below normal. In spite of the low October precipitation, the number of stormy days was larger than usual. A trace or more of precipitation fell on 17 of the days of the month.

Maximum temperature 44, minimum -16; precipitation .39 inch.

ARCHER:

The month of October finished cold, with snow. Little field work has been accomplished, Monday, October 26, being the only day which permitted of such. Two snow storms occurred October 27 and 28 with a combined depth of about 9 inches. Most of it has melted but the ground is still covered.

On October 27 a group of University officials including President Elliot and Mr. Holiday of the Board of Trustees, Presdient Crane, Dean Hill, Director Quayle and Fiscal Agent Fuller visited the station.

Maximum temperature 49, minimum 5; precipitation .38 inch.

AKRON:

Severe winter weather has prevailed the early part of the past week. Treating posts, fanning grain, hanging seed corn and grain sorghums, and like odd jobs received attention. Work on the fence was resumed Wednesday. Posts are practically all set on the west line.

Mr. Maurice Little had the Agricultural and Science class of the Akron High School out for a visit over the station Tuesday forenoon but the weather was so severe that most of the time was spent inside discussing experimental results.

Maximum temperature 63, minimum 8; precipitation .10 inch.

HAYS:

Generally cloudy, cold and breezy weather with daily freezing temperatures prevailed throughout the week. Today, October 31, however, the sun has been shining all day and it is much warmer. Snow flurries passed over on two days, but there was not sufficient snow either time to measure more than just a trace.

In spite of the cold weather with freezing temperatures, nearly every night for the past two weeks, wheat is slowly coming up on the dry plats mentioned in a previous report. However, this wheat is badly in need of a good rain for the small showers which have caused germination have not added enough moisture to the soil to last long. Generally the wheat, except on the dry spots, looks very good.

Work on the project has consisted of listing, hauling manure and husking corn. The Forage project finished threshing today.

Hays, continued:

The month of October has been a weather record breaker in that it is the coldest October on record for many years. Although October, 1917, shows a lower temperature for one date, late in the month, October 30, the weather previous to that date was not below normal, whereas October, 1925, shows minimum temperatures of 12 degrees one night, and 15 degrees two other nights, and upon twelve different dates the thermometer reached or passed below 32 degrees.

Work on the commercial farm has, for the most part been threshing of pure seed Pink Kafir. Some water pipe laying and general repair work has also been done.

GARDEN CITY:

Rather low temperatures for this time of the year were recorded on three days of the past week. These low temperatures were accompanied with quite a wind movement making the weather disagreeable.

The remaining sorghums were mowed and raked during the week. Wheat on the October 30 date was seeded yesterday. The two prior seedings have not emerged as yet.

Maximum temperature 64, minimum 12; precipitation 0.

DALHART:

The past week has been cold. It has been unusually cold for this early in the season, but fair weather has prevailed. The minimum temperature dropped to 13 and was followed by a 15, 17 and 21. Maximum temperature for the week was 75 on two days early in the week. The low temperature recorded this fall is the lowest on record with one exception during the month of October. The one exception occurred on the same day, October 28, in 1917 when the minimum was 11.

Excellent working weather has prevailed in the panhandle all week. Much field work was accomplished and the rush work completed. Cowpeas were hauled in from the rotations and variety plats, weighed and stacked. Some of the forage sorghums that were dry were weighed and put in the barn loft. This included Sudan grass and millet. The remainder of the plats which were harvested last week and the increase fields which were also bound last week were shocked during this week.

The field work being out of the way for awhile, time will be devoted to odd repair jobs.

TUCUMCARI:

Not only has the past week broken all records for cold weather in October, but the month has been the coldest October since 1905. During the week a large amount of increase milo has been headed, all corn plats husked and hauled, the wheat and rye plats fenced to prevent rabbit injury, and cut-off boxes in the water system packed to prevent freezing. All grapes and small fruit and ornamental trees were sprayed with a lime-sulphur solution to prevent girdling by rabbits.

Threshing has not been begun, as the majority of sorghums were late and required a long period for curing. It is planned to complete heading the grain sorghum increase the first of the week and then to begin threshing. With pleasant weather this should take but a relatively short time, but the majority of plats should soon be sufficiently cured in the shock to make for easy threshing. Stover samples for determining air dry weights will again be taken this year. Plats which were headed in baskets previous to harvesting of stover will be threshed first, followed by the more completely cured shocked plats. It is probable a small number of late date plats and variety plats will not be sufficiently cured to permit of threshing until late November.

Due to the heavy rainfall the first half of the month and the unusually cool weather of the past two months, cotton as a rule is opening very slowly, with prospects of a low yield on all but the early planted fields. There will be a very large percentage of late, soft bolls which will rot, rather than open. The recent cold weather is said to have very materially reduced the yield in the irrigated sections around Carlsbad and El Paso.

Maximum temperature 79, minimum 17; mean for the week, 42.
Average hourly wind velocity, 6.0 miles.

LAWTON:

Freezing temperatures beginning the 28th terminated a period of weather that had been favorable to the prosecution of field work and to the maturity of late cotton.

From October 28 to November 1 the minimum temperatures ranged from 21 to 30, while the maximum varied from 35 to 54. This period of freezing weather very materially reduced the total production of cotton. Summing up the situation briefly it may be said that practically all of the crop fruited after September 1. From one-half to two-thirds of the bolls matured. The remaining bolls are green, sappy, and frozen. Possibly

Lawton, continued:

half of these bolls may be salvaged under favorable weather conditions, but considerable time will be required. On the station crop, the plants retain from 3 to 12 green bolls, depending somewhat on the variety. Bolly cotton at present commands from 7 to 11 cents per pound on the market while some of the inland market points refuse to purchase at any price. Further depression of the market will not pay the picking and marketing expenses.

Curing of sorghum crops in the shock progressed quite satisfactorily the past ten days.

WOODWARD:

The weather for the past week has averaged unusually cold for this season of the year. The temperature dropped to 16 degrees on the 30th, this breaking the previous record for low temperature in October at this station. Several days were cloudy and threatening, but little moisture resulted. On the 25th a shower and snow of .03 inch occurred.

Work for the week consisted of threshing, hauling and stacking feed from experimental plats, picking cotton, and putting cement floor in feed room of new feed barn on Dairy Farm.

Maximum temperature 70, minimum 16; precipitation .03 inch.
Average hourly wind velocity, 5.9 miles.